

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Kindly cancel claims 1 - 23 without prejudice, in favor of new claims 24 - 46.

Claims 1 - 23. (Cancelled)

24. (New) An amorphous porous open-pored shaped SiO₂ body of two layers, wherein the layers have an identical structure and composition and are formed concurrently.

25. (New) The shaped SiO₂ body of claim 24, which has a solids content between 80 and 95% by weight.

26. (New) The shaped SiO₂ body of claim 24, which has a density between 1.4 g/cm³ and 1.8 g/cm³.

27. (New) The shaped SiO₂ body of claim 24, which has a shell thickness between 1 and 50 mm.

28. (New) The shaped SiO₂ body of claim 24, which has a proportion of atomic impurities of \leq 300 ppmw.

29. (New) A method for the production of a shaped SiO₂ body of claim 24, comprising pumping a dispersion containing SiO₂ particles into a pressure casting mold of a pressure casting machine, and dehydrating the dispersion via an inner porous plastic membrane and an outer porous plastic membrane to form the shaped SiO₂ body.

30. (New) The method of claim 29, wherein filling is carried out at a pressure between 0.5 and 100 bar.

31. (New) The method of claim 29, wherein a shell formation is carried out at a pressure between 0.5 and 100 bar.

32. (New) The method of claim 29, which has a cycle time of between 5 and 90 min.

33. (New) The method of claim 29, wherein the shell formation takes place at a temperature between 20°C and 30°C.

34. (New) The method of claim 29, wherein the pressure casting mold consists of two porous membrane parts, which together form a closed intermediate space that corresponds to an intended shaped body shape.

35. (New) The method of claim 29, wherein membranes which have an open porosity between 5 and 60% by volume are used as a porous membrane.

36. (New) The method of claim 35, wherein a membrane with a pore size between 10 nanometers and 100 micrometers is used as a porous membrane.

37. (New) The method of claim 29, wherein the dispersion has a fill factor of amorphous SiO₂ particles between 65 and 75% by weight.

38. (New) The method of claim 29, wherein one or more alcohols selected from the group consisting of methanol, ethanol, and propanol; acetone; water; or mixtures thereof are used as the continuous phase of the dispersion.

39. (New) The method of claim 38, wherein water which has a resistivity ≥ 18 megaohm·cm is used as the continuous phase.

40. (New) The method of claim 29, wherein the SiO₂ particles have a particle size distribution with a D50 value between 10 and 50 μm.

41. (New) The method of claim 29, wherein the SiO₂ particles have a crystalline fraction of at most 1%.

42. (New) The method of claim 29, wherein the SiO₂ particles in the dispersion have a bimodal particle size distribution.

43. (New) The method of claim 29, further comprising releasing the shaped SiO₂ body from the mold by separating the two pressure casting mold parts and simultaneously applying compressed air and/or water to the porous membranes.

44. (New) The method of claim 43, wherein the shaped SiO₂ body released from the mold is dried by means of vacuum drying, drying by means of hot gases, contact drying, or microwave drying.

45. (New) A shaped body of claim 24 which is a filter material, thermal insulation material, heat shield, catalyst support material, preform for glass fibers, preform for optical fibers, preform for optical glass, or preform for quartz articles.

46. (New) A porous, open pored shaped SiO₂ body prepared by the process of claim 29, having two layers connected through a transition zone.